

LEITRIM - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Thur Mountain
Other names used for site	<i>An Tor</i>
IGH THEME	IGH9 Upper Carboniferous and Permian, IGH7 Quaternary
TOWNLAND(S)	Barrs West, Barrs East, Cullentragh, Sradrine, Lagoon, Barr of Farrow
NEAREST TOWN/VILLAGE	Manorhamilton
SIX INCH MAP NUMBER	8, 12
ITM CO-ORDINATES	597995E 840466N (summit)
1:50,000 O.S. SHEET Nos. 16, 17	GSI BEDROCK 1:100,000 SHEET NO. 7
GISCODE LM030	

Outline Site Description

Thur Mountain is a domed, upland ridge approximately 8 kilometres east of Manorhamilton.

Geological System/Age and Primary Rock Type

The summit of Thur Mountain is capped with sandstones of Namurian age (middle Carboniferous), while the lower slopes are underlain by Namurian (middle Carboniferous) shale (c. 320 Ma), of the Briscloonagh Sandstone Formation and the Dergvone Shale Formation respectively. The ribbed, hilly forms on the lower slopes of the southern side of the mountain are Quaternary (Ice Age) features. A number of gullies that allow streams to flow off the mountainsides were all formed since the Ice Age, in the Holocene Epoch. Blanket peat on top of the ridge is of similar age.

Main Geological or Geomorphological Interest

Although Thur Mountain itself owes its elevation and form largely to the underlying bedrock, this is mostly invisible, having been blanketed by thick Quaternary deposits, left during and since the Ice Age.

Excellent exposures into the bedrock are seen in stream gullies, however, which cut through the Quaternary deposits and actually incise the bedrock beneath these also. Exposure is also present on the crest of Thur Mountain itself, both naturally at the summit, and in a number of small quarries. Geologically, the exposures are good representative sections of the stratigraphy of the Lough Allen area, and specifically the Leitrim Group. The stratigraphy exposed in the streams effectively starts with the Dergvone Shale Formation and ends with the Briscloonagh Sandstone Formation.

The stream gullies are, in places, heavily overgrown, steep and difficult to access. Exposure, whilst better than in most parts of the district, is still relatively poor and far from complete in sections. Consequently, whilst far from perfect, the locality is one of the better representative sections of the stratigraphic sequence in the district.

Leitrim is one of the few localities in the world where upland ribbed moraines were formed by glacier ice, and they are particularly well expressed on the southern side of Thur Mountain, from Barrs West to Lagoon Townlands. The ridges are up to 1km long, 300m wide, and 15m to 20m high.

Site Importance – County Geological Site

This site has good exposures, in the gullies around the ridge, into Namurian sandstones and shales, and the gully channels have been important historically in mapping out the Namurian rocks of the region. Given the importance of these exposures historically, the site is recommended for County Geological Site status.

Management/promotion issues

There has been an increase in relatively haphazard quarrying in recent decades on Thur Mountain, which means that much of the summit area is quite scarred. The gully and ribbed moraine features are on private farmland and no access should be had without owner permission. As well as this, the gullies are incised by some relatively fast-flowing stream and river water, so care is advised if examining them.



The stream gully at Blackrock, on the boundary of Barr of Farrow and Cullentragh Townlands, which exposes the Killooman Shale Member, part of the Dergvone Shale Formation.



The stream gully at Lacoön – Sdraine, which exposes bedrock of the Lacoön Flagstone Member.



The upland ribbed moraines on the southern side of Thur Mountain.



Quarry in the Briscloonagh Sandstone Formation on the shoulder of Thur Mountain.

